Involta

A Vertiv Case Study

About The Company

Involta is an award-winning national IT service provider and consulting firm that helps organizations plan, manage, and execute hybrid IT strategies. It does so through a broad range of services including colocation, cloud computing, managed IT, cybersecurity, and fiber and network connectivity. The company also has industry-specific services for healthcare, manufacturing, finance, and technology that enable compliance and IT transformation initiatives.

Involta maintains partnerships with top tier technology vendors and major public cloud providers dedicated to building reliable and secure solutions.

Through innovative consulting, Involta is able to utilize its unique resources and partnerships to deliver advanced hybrid IT solutions while maintaining the Involta brand promise of Superior Infrastructure, Operational Excellence, and People Who Deliver.

www.involta.com

Background

With a named derived from the Italian word for vault, Involta has built its colocation facilities to be vaults for customer equipment and data. Its Akron, Ohio, location is 52,000 square feet of protection having concrete floors and decks and 12-inch concrete walls. And because physical and cyber security is a focus for the company, the facility uses biometric-based two-factor authentication.

The company is also growing rapidly. Involta now has 14 data centers in six different states. In fact, its Akron facility has doubled its square footage in the last five years. Founded in 2007 as a single-facility colocation provider, Involta has had to scale its infrastructure and offerings to match its customers' evolving needs.

"Colocation and security considerations are coming to the forefront of customer concerns. They are looking for good partners that can deliver resilient, reliable services on a consistent basis, allowing their IT teams to focus on driving their businesses in the right direction," said Tom Lang, director of data center operations for Involta.

Correspondingly, the Involta team also requires partnerships that can support this service delivery by providing solutions the company can leverage for optimal operation of its facilities.

Case Summary

Location: Data center facilities in Akron and Independence, Ohio, and Pittsburgh, Pennsylvania

Vertiv Solutions: Liebert® DSE free-cooling economization system with the optimization feature upgrade.

Critical Needs: In response to the ongoing increase in data production and consumption, many Involta customers are scaling their IT infrastructures and increasing rack densities while consolidating equipment into smaller footprints. This trend has resulted in more concentrated heat loads that require an advanced thermal management strategy to ensure optimal operation, as well as continued gains in energy efficiency.

Results:

- More precise cooling to match changing load requirements
- Improved efficiency with smoother transitions between free and mechanical cooling
- Reduced power consumption and cost savings due to more economization hours
- Strengthened business reputation through consistent fulfillment of contractual obligations

> *"Whether we are operating in mechanical or EconoPhase mode, the Liebert® DSE™ free-cooling economization system has provided and continues to provide us with the highest efficiency and reliability for our data center operations."*
>
> **— Tom Lang, Director of Data Center Operations, Involta**

Solution

Having a Tier 3 rating per Uptime Institute standards means the most critical components for Involta's Akron facility — power and cooling — are redundant and reliable at all times. This allows the colocation facility to do a lot of servicing or testing of its design and operations without having any negative impact to service delivery.

The company uses Vertiv thermal management products like the Liebert® DSE free-cooling economization system across most of its locations, and Vertiv power infrastructure in a few, to ensure availability, achieve greater efficiencies, and generate cost savings that positively impact the bottom line.

Involta chose the Liebert DSE system because it is highly efficient. In fact, it is the most efficient water-free data center cooling solution in its class.

Introduced in early 2018, the Liebert DSE Optimization is an enhancement to the Liebert iCOM™ controls used by the Liebert DSE. It optimizes the operation of the condenser fans, compressors, and refrigerant pumps to further reduce power consumption.

The system's autotuning makes transitions between mechanical and free cooling smoother, allowing Involta to more frequently leverage higher outside temperatures.

By utilizing free cooling for longer operating hours, Involta saw continued gains in energy efficiency. According to Lang, the system offers a faster return on investment and is a highly scalable solution that meets Involta's needs as a growing company.

"Already having Vertiv as a reliable partner made performing the optimization upgrade a no-brainer," Lang said. "We had total confidence in Vertiv's testing of the Liebert iCOM control enhancement. We knew we could go forward in adding it to our units without any risk to our operations and that we could still meet all our customers' Service Level Agreements."

According to Ben Herron, data center administrator for Involta's Akron facility, one of the most valuable features of the Liebert iCOM controls is the diagnostics screen, which provides unit status at a glance.

"We can also drill deeper and have more information on the operation of the unit right at our fingertips," Herron said. "From the unit's diagnostic screen, we're able to see temperatures and pressures in the system, as well as which circuits are running."

The controls have also proven helpful during tours of Involta facilities. It shows customers one way the company is leveraging technology in its data centers to continue to optimize operations on the customers' behalf.

"Even though we are servicing our customers based on SLAs, which is very important, we also want to do it as efficiently as possible," Herron said. "The Liebert DSE Optimization has played a key role in that effort."

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